



Filtration

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Remote Mount



Spin-On



Bypass Series



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*Lubrication Filtration Systems Index*

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## Selection Information

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### General

Racor Lubrication Filtration Systems are permanent, full flow units which contain a reusable, stainless steel wire cloth filter which is designed to effectively trap damaging solids.

An added value of the wire cloth filter is its effectiveness as a visual diagnostic tool to monitor potential engine wear. Cleanup of the wire cloth filter is easy. The filter can be soft brushed in solvent or cleaned in a parts washer, then re-inserted between the permanent housings. Racor Lubrication Filtration Systems (LFS) are available in two unique design configurations: A conventional 'sandwich' type and the new 'spin-on' type.

*The standard LFS 'sandwich' type units utilize a flat disc shaped wire cloth filter that fits between die-cast aluminum housings. This cleanable filter design is available in a choice of micron ratings. The standard oil filter is replaced by an adapter which spins onto the filter header. Adapters are available to fit virtually any engine.*

*The new Spin-on 700 Series feature a cylindrical shaped wire cloth filter that fits inside an aluminum housing. This model directly replaces the standard oil filter right on the engine or may also be located in a convenient remote location.*

Most Racor LFS systems come standard with a warning light feature. When the wire cloth filter reaches its restriction capacity, the system goes into a by-pass mode and the light signals the operator there is a need for service. Frequency of filter cleansing is determined by the contamination levels present in the fluid. The cleaning interval may be more frequent when first installed. The units are rated by the flow rate of the fluid.

*The draining, crushing, accounting and related liabilities associated with used spin-on type filter disposal are eliminated with these permanent filter designs.*

### 1. DETERMINE THE TYPE OF LFS UNIT FOR YOUR APPLICATION:

- A. REMOTE MOUNT LFS
- B. SPIN-ON 700 SERIES, ENGINE MOUNT
- C. BY-PASS FILTRATION, REMOTE MOUNT

### 2. DETERMINE THE FLOW RATE OF THE FLUID TO BE FILTERED.

*You may also match a unit by the engine size as follows:*

*LFS35: 6 GPM. Automatic transmissions, small engines, small motorcycles and AC power generators.*

*LFS62 or 64: 20 GPM. Medium / heavy-duty applications, on and off-road and marine equipment.*

*LFS92: 45 GPM. Large diesel engine oil, transmission and low pressure hydraulic return lines.*

*LFS 700 Series. Large diesel engine oil: Caterpillar, Cummins, Detroit Diesel, Mack and Navistar.*

*62 or 64BP: By-pass filtration, up to 20 GPM and 92BP: By-pass filtration up to 45 GPM.*

*LFS 800 Series: By-pass filtration recommended for use with the LFS 700 Series filters.*

### 3. DETERMINE THE DESIRED CLEANLINESS FOR THE SYSTEM:

5 Micron: (.0002") and

10 Micron: (.0004") are Recommended for by-pass oil filtration and hydraulic fluid.

**Above filters not for use with full flow lubrication oil supply.**

28 Micron: (.0011") Fine filtration recommended for engine oil and transmission filtration.

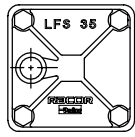
40 Micron: (.0016") Recommended for primary engine oil and transmission filtration.

60 Micron: (.0024") Recommended for coolant systems and hydraulic return lines.

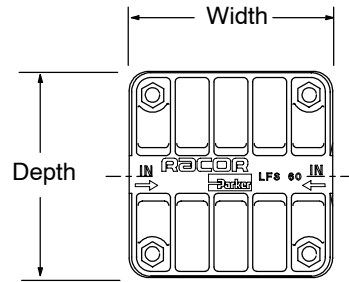
115 Micron: (.0045") Porous filter, recommended for coolant systems.

**Using this information, select a unit from the following page index. Also, refer to the specific liquid filtration unit information pages which follow.**

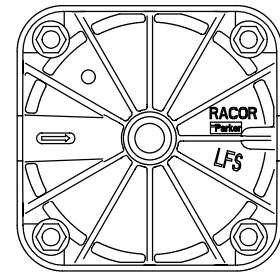
## Model Illustrations



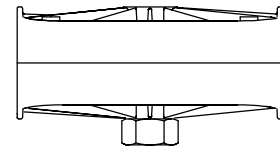
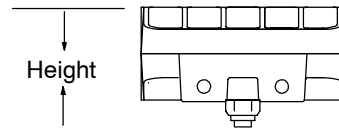
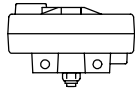
LFS 35



LFS 62 / 64  
and 62/64BP



LFS 92 and 92BP



## Special Notes

1. For additional information and availability, contact customer service at: (800) 344-3286, 6 AM to 5 PM, Pacific Time.

## Specifications

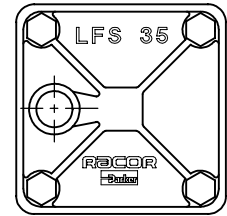
<b>BASIC MODELS</b>		<b>LFS 35</b>	<b>LFS 62 / 64 62 / 64BP</b>	<b>LFS 92 92BP</b>
Fluid Flow Rate (Maximum)	GPM	6	20	45
	LPM	22.7	75.7	170.3
Hose Size (min).	I.D.	3/8" (#6)	5/8" (#10)	1" (#16)
PSI, Maximum	PSI	150	150	150
	kPa	1034	1034	1034
Screen Size	Micron	28, 40	5, 10, 28, 40, 60, 115	5, 10, 28, 40, 60, 115
Port Size		3/8" NPT	1 1/16"-12 SAE	1 5/16"-12 SAE
Height	in.	2.45	3.50	4.75
	mm	62.3	83.9	120.7
Width	in.	3.63	6.00	9.62
	mm	92.1	152.0	244.4
Depth	in.	3.63	6.00	9.50
	mm	92.1	152.0	241.3
Weight (dry)	Lbs.	1.21	4.3	10.6
	kgs.	.55	1.95	4.81

- Notes: 1. For accurate engine flow rates, consult your engine or equipment manual, manufacturer's agent or a Racor distributor.  
 2. Oil change frequencies are not affected and should be performed according to the manufacturer's recommendations.  
 3. The only accredited way to extend your oil change interval is through a formal lube analysis program.

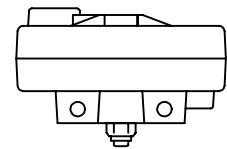
**SPECIFICATIONS** are found on the Lubrication Filtration Systems introduction page.

**How to Order** -The example below illustrates how the part numbers are constructed.

<b>LFS 35</b>	<b>28</b>	<b>TT</b>
<u>Basic Unit</u> 6 GPM Lubrication Filtration System with 3.5" diameter filter.	<u>Filter Micron Rating.</u> Specify: '28' for 28 micron or '40' for 40 micron	<u>Light Switch</u> Note: Do not use with gasoline or other volatile fluids. (Omit if not desired).



LFS 35

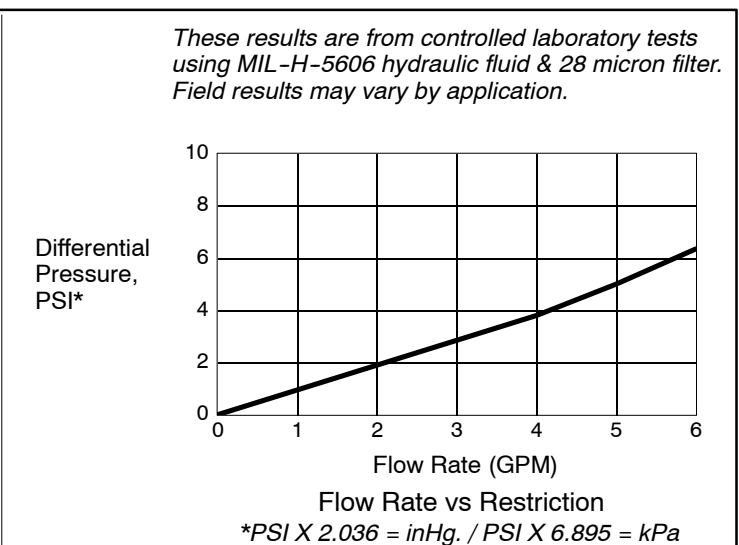
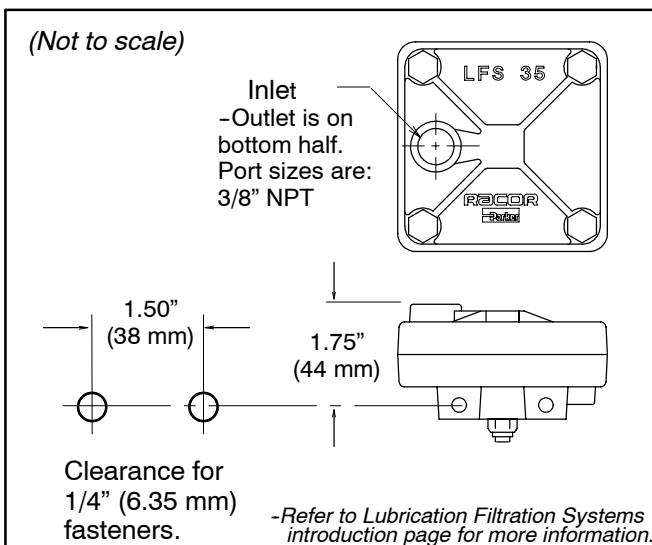


## Illustrated Parts List

Item	Part No.	Description	Qty.
1	46003	Gasket, Plug/Switch	1
2	46005	Spring, 6" series	1
3	LFS RK35BB	Check Ball, 1/2" diameter	1
4	46004	Plug, 6" series	1
5	LFS RK356LS <sup>1</sup>	By-pass Sensor	1
6	46037	Housing, Outlet	1
7	LFS 3528WCF	28 Micron Stainless Steel Filter	1
	LFS 3540WCF	40 Micron Stainless Steel Filter	1
8	46036	Housing, Inlet	1
9	46039	Washer	4
10	46147	Universal Stud, 5/16" x 1 1/2"	4
	12048	Hex Nut	4
	46079	Installation Instructions	
	46090	Instruction Addendum	

<sup>1</sup> Do not use sensor when filtering gasoline/volatile fluids.  
 For visual indicator kits, fittings, hose information and adapters, see the Accessories Section.

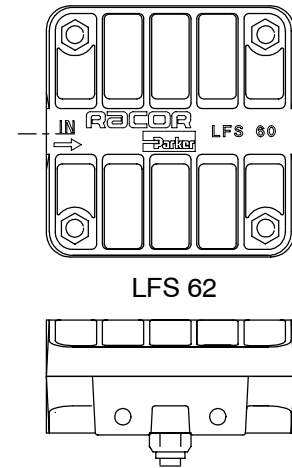
## Mounting Hole Pattern / Performance Graph



**SPECIFICATIONS** are found on the Lubrication Filtration Systems introduction page.

**How to Order** -The example below illustrates how the part numbers are constructed.

<b>LFS 62</b>	<b>28</b>	<b>TT</b>
<u>Standard Unit</u> 20 GPM, Six inch (6") diameter filter. Features one inlet and outlet port. Specify the LFS 64 for two inlet/outlet ports.	<u>Filter Micron Rating.</u> Specify the micron rating by number: 28, 40, 60 or 115	<u>Light Switch</u> Note: Do not use with gasoline or other volatile fluids. (Omit if not desired).



## Illustrated Parts List

Item	Part No.	Description	Qty.
1	46003	Gasket, Plug/Switch	1
2	46005	Spring, 6" series	1
3	LFS RK60BB	Check Ball, 5/8" diameter	1
4	46004	Plug, 6" series	1
5	LFS RK356LS <sup>1</sup>	By-pass Sensor	1
6	46010	Housing, Outlet, LFS 62	1
	46131	Housing, Outlet, LFS 64	1
7	46181	Port Plug, #12	2
8	LFS 6028WCF	28 Micron Stainless Steel Filter	1
	LFS 6040WCF	40 Micron Stainless Steel Filter	1
	LFS 6060WCF	60 Micron Stainless Steel Filter	1
	LFS 60115WCF	115 Micron Stainless Steel Filter	1
9	LFS RK60SK	Stud, 3/8" X 1 1/2"	4
10	46009	Housing, Inlet, LFS 62	1
	46132	Housing, Inlet, LFS 64	1
11	46002	Washer	4
12	46001	Nut, 3/8"-16 X 9/16"	4
13	LFS RK60MFK	6"Optional Multi-filter Kit	1
	46182	Installation Instructions	
	46090	Instruction Addendum	

<sup>1</sup> Do not use sensor when filtering gasoline or volatile fluids. For visual indicator kits, fittings, hose information and adapters, see the Accessories Section.

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## Mounting Hole Pattern / Performance Graph

-Refer to Lubrication Filtration Systems introduction page for more information.

(Not to scale)

Inlet  
-Outlet is on bottom half.  
Port sizes are: 1 1/16"-12 (SAEJ1926)

Clearance for 1/4" (6.35 mm) fasteners.

2.30" (58 mm)

2.32" (59 mm)

These results are from controlled laboratory tests using MIL-H-5606 hydraulic fluid & 40 micron filter. Field results may vary by application.

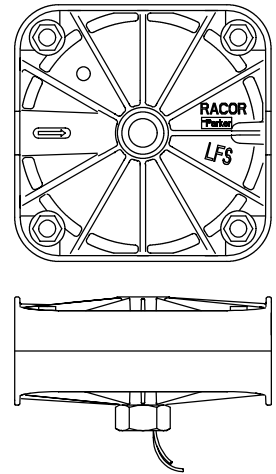
Flow Rate (GPM)	Differential Pressure (PSI)
0	0
5	~1.5
10	~2.5
15	~4.5
20	~7.5

\*PSI X 2.036 = inHg. / PSI X 6.895 = kPa

**SPECIFICATIONS** are found on the Lubrication Filtration Systems introduction page.

**How to Order** -The example below illustrates how the part numbers are constructed.

<b>LFS 92</b>	<b>28</b>	<b>TT</b>
<u>Standard Unit</u> 45 GPM, Nine inch (9") diameter filter. Features one inlet and outlet port and two 1/4"NPT service ports.	<u>Filter Micron Rating.</u> Specify the micron rating by number: 28, 40, 60 or 115	<u>By-pass Sensor Switch</u> Visual indicator not included. See Accessories. Note: Not for use with gasoline/ volatile fluids. (Omit if not desired).



**Illustrated Parts List** -Refer to the Accessories Section for items not listed.

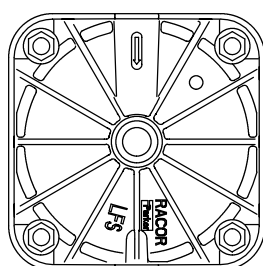
Item	Part No.	Description	Qty.
1	46029	Nut, 5/8"-18	4
	46028	Washer	4
2	46202	Housing, Inlet	1
3	LFS9028WCF	28 Micron Stainless Steel Filter	1
	LFS9040WCF	40 Micron Stainless Steel Filter	1
	LFS9060WCF	60 Micron Stainless Steel Filter	1
	LFS90115WCF	115 Micron Stainless Steel Filter	1
4	LFS RK90SK	Stud, 5/8"-18 X 2 1/8"	4
5	46203	Housing, Outlet	1
6	46204	Mounting Bracket	1
7	LFS RK46138 <sup>1</sup>	By-pass Sensor Switch,	
8	46165	By-pass Plug	1
9	46138	By-pass Relief Valve	1
10	46139	Spring, LFS90	1
11	46152	O-ring, Size #920	1
	46180	Installation Instructions	
	46090	Instruction Addendum	

<sup>1</sup> Do not use sensor when filtering gasoline or volatile fluids. For visual indicator kits, fittings, hose information and adapters, see the Accessories Section.

Redesigned LFS92

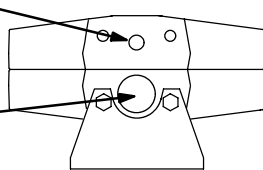
## Mounting Hole Pattern / Performance Graph

Refer to Lubrication Filtration Systems introduction page for more information.

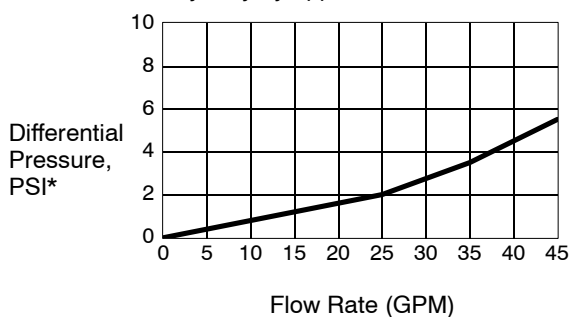


1/4"NPT Service ports are on each Housing, opposite the inlet or outlet ports.

Inlet is on top half, Outlet is on bottom half. Port sizes are 1 5/16"-12 (SAEJ1926)



These results are from controlled laboratory tests using MIL-H-5606 hydraulic fluid & 40 micron filter. Field results may vary by application.



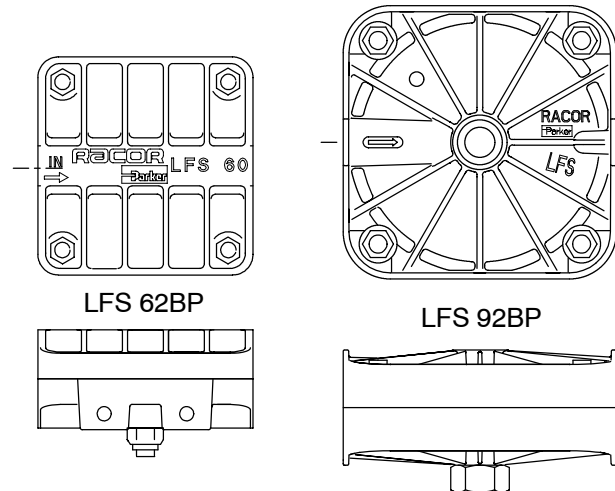
Flow Rate vs Restriction

\*PSI X 2.036 = inHg. / PSI X 6.895 = kPa

**SPECIFICATIONS** -See introduction page.

**How to Order** -See example below.

<b>LFS 62</b>	<b>05BP</b>
Specify: <b>62</b> or <b>64</b> for 20 GPM, 6" diameter filter, or <b>92</b> for 45 GPM, 9" diameter filter. One inlet and one outlet, standard on either size.	By-pass filtration. Specify: <b>05BP</b> for 5 micron filter or <b>10BP</b> for 10 micron filter.



## Illustrated Parts List

Item	Part No.	Description	Qty.
1	46004	Plug, 62 / 64	1
2	46003	Gasket, Plug 62 / 64	1
3	46005	Spring, 62 / 64	1
4	46006	By-pass ball, 5/8" dia.	1
5	46156	Housing, Outlet, 62	1
	46010	Housing, Outlet, 64	1
	46154	Housing, Outlet, 92	1
6	LFS6005WCF	LFS62: 5 Micron Stainless Steel Filter	1
	LFS6010WCF	LFS62: 10 Micron Stainless Steel Filter	1
	LFS9005WCF	LFS92: 5 Micron Stainless Steel Filter	1
	LFS9010WCF	LFS92: 10 Micron Stainless Steel Filter	1
7	46157	Housing, Inlet, 62	1
	46009	Housing, Inlet, 64	1
	46155	Housing, Inlet, 92	1
8	46165	By-pass Plug, 92	1
9	46152	O-ring, Size #920	1
10	46139	Spring, 92	1
11	46166	By-pass relief valve	1
12	LFS RK60SK	Stud, 3/8"-24 X 2"	4
	LFS RK90SK	Stud, 5/8"-18 X 2 1/8"	4
13	46002	Washer, 3/8"	4
	46028	Washer	4
14	46001	Nut, 3/8"-24	4
	46029	Nut, 5/8"-18	4
15	46204	Mounting Bracket 92 (not shown)	1
	46168	Installation Instructions	

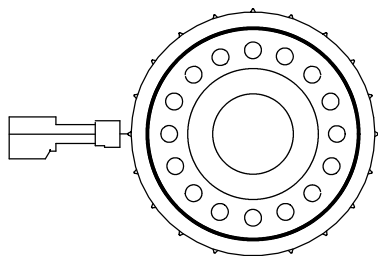
**6**

## Mounting Hole Pattern - Not to Scale

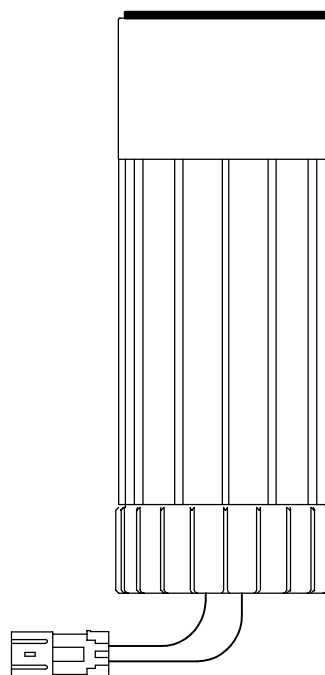
<p><b>LFS 62 / 64BP</b></p> <p>Inlet is on top half, Outlet is on bottom half. Port sizes are: 1 1/16"-12 (SAEJ1926)</p> <p>Clearance for 1/4" (6.35 mm) fasteners.</p>	<p><b>LFS 92BP</b></p> <p>1/4"NPT Service ports are on each Housing, opposite the inlet or outlet ports.</p> <p>Inlet is on top half, Outlet is on bottom half. Port sizes are 1 5/16"-12 (SAEJ1926)</p>
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## Model Illustration

No Scale



Engine Side (Seal Side) View



LFS 700LS Series

## Special Notes

1. For additional information and availability, contact customer service at: (800) 344-3286, 6 AM to 5 PM, Pacific Time.

## Specifications

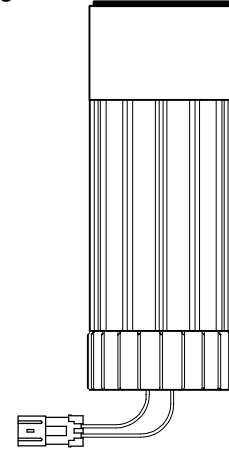
BASIC MODELS		LFS 700LS	LFS 703LS	LFS 705LS	LFS 707LS	LFS 710LS	LFS 712LS	LFS 714LS	LFS 718LS
Flow Rate (Maximum)	GPM	45	45	45	45	45	45	45	
	LPM	170	170	170	170	170	170	170	
PSI, (max.)	PSI	150	150	150	150	150	150	150	150
	kPa	1034	1034	1034	1034	1034	1034	1034	1034
Diff. Pressure	PSI	7.5	7.5	7.5	7.5	7.5	7.5	7.5	
	kg/cm <sup>2</sup>	.52	.52	.52	.52	.52	.52	.52	
Outer Element	(mic)	25	25	25	25	25	25	25	25
Inner Element	(mic)	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Clearance for element removal	in.	21	21	21	21	21	21	21	12
	cm	53.3	53.3	53.3	53.3	53.3	53.3	53.3	30.5
Height	in.	12.25	12.25	12.25	12.25	12.25	12.25	12.25	7.5
	cm	31	31	31	31	31	31	31	19.1
Diameter	in.	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
	cm	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4
Weight (dry)	Lbs.	6.8	6.2	6.2	6.2	6.2	6.2	6.2	4.1
	kgs.	3.1	2.8	2.8	2.8	2.8	2.8	2.8	1.9

Notes: 1. For accurate engine flow rates, consult your engine or equipment manual, manufacturer's agent or a Racor distributor.  
 2. Oil change frequencies are not affected and should be performed according to manufacturer's recommendations.  
 3. The only accredited way to extend your oil change interval is through a formal lube analysis program.

**SPECIFICATIONS** are found on the Lubrication Filtration Systems introduction page.

**How to Order** -The example below illustrates how the part numbers are constructed.

<b>LFS</b>	<b>700LS</b>								
Lubrication Filtration Systems. Spin-on oil filter with cleanable and reusable stainless steel cartridge for diesel engines. Includes internal by-pass (opens at 24 PSID) with differential pressure sensor switch and panel mount indicator.	<u>Model: Center Mounting Thread.</u> Specify one:  <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;"><b>700LS:</b> 2 1/4"-12</td> <td style="width: 50%;"><b>710LS:</b> 1 3/8"-16</td> </tr> <tr> <td><b>703LS:</b> 1 1/2"-12</td> <td><b>712LS:</b> 1 1/2"-16</td> </tr> <tr> <td><b>705LS:</b> 1 5/8"-12</td> <td><b>714LS:</b> 36M X 1.5</td> </tr> <tr> <td><b>707LS:</b> 1 1/8"-16</td> <td><b>718LS:</b> 1 1/2"-16</td> </tr> </table>	<b>700LS:</b> 2 1/4"-12	<b>710LS:</b> 1 3/8"-16	<b>703LS:</b> 1 1/2"-12	<b>712LS:</b> 1 1/2"-16	<b>705LS:</b> 1 5/8"-12	<b>714LS:</b> 36M X 1.5	<b>707LS:</b> 1 1/8"-16	<b>718LS:</b> 1 1/2"-16
<b>700LS:</b> 2 1/4"-12	<b>710LS:</b> 1 3/8"-16								
<b>703LS:</b> 1 1/2"-12	<b>712LS:</b> 1 1/2"-16								
<b>705LS:</b> 1 5/8"-12	<b>714LS:</b> 36M X 1.5								
<b>707LS:</b> 1 1/8"-16	<b>718LS:</b> 1 1/2"-16								



**Illustrated Parts List** -Refer to the Accessories Section for items not listed.

LFS 700LS Series	Item Part No.	Description	Qty.
	1	LFSRK755 Seal Kit (700-714LS)	1
		LFSRK758 Seal Kit (718LS)	1
	2	46502-01 Housing, LFS 710LS	1
		46502-02 Housing, LFS 703LS	1
		46502-03 Housing, LFS 707LS	1
		46502-04 Housing, LFS 712LS	1
		46502-05 Housing, LFS 705LS	1
		46502-06 Housing, LFS 700LS	1
		46502-07 Housing, LFS 714LS	1
	46502-08 Housing, LFS 718LS	1	
3	LFSRK750 Element, Outer (Dual element only)	1	
4	LFSRK751 Element, Inner (Dual element only)	1	
	LFSRK759 Element, (703-714LS Series)	1	
	LFSRK757 Element, (718LS only)	1	
5	46574 Element Retainer, Outer	1	
6	46521 Spring, Main Compression	1	
7	LFSRK753 End Cap, LFS 700LS Series	1	
	46539 700 Series Installation Instructions	1	
8	46013 Light and Panel Kit, 12V	1	
9	46065 Light Only	1	

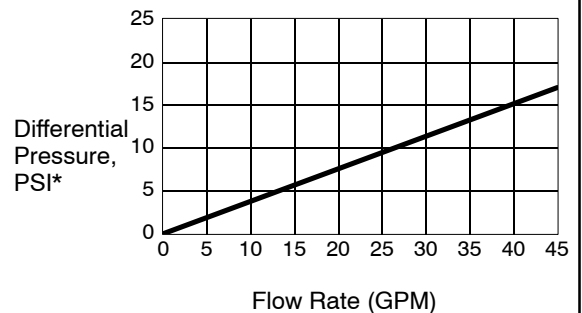


**Applications List** -Contact Racor Customer Service for applications not listed.

Engine Make	Engine Model	LFS Model
CATERPILLAR	3116, 3208T, 3304, 3306	LFS 707LS
	3176, 3406, 3408, 3412, C10, C12	LFS 712LS
CUMMINS	All engines using LF-3000 combination full flow by-pass filter	LFS 700LS
	C Series, L10, N-14, Big Cam IV	
	230, 240, NTC-250, 290, 300	
	350, 355, 370, 400, All KT	LFS 703LS
DETROIT	*Series 50 & 60, 1993 MY and on	LFS 705LSKT
	All 53, 71, 92, 149 Series & Pre '93 Series 60	LFS 703LS
MACK TRUCK	EM-6, EN, ENDT,*EM-7	LFS707LSKT
NAVISTAR	6.9, 7.3, 7.3 Power Stroke	LFS 718LS
	DT-466, 1994 and on	LFS 714LS

\*Some engines use 2 filters. The KT kit provides 2 filter Assemblies.

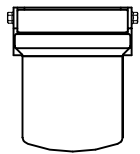
These results are from controlled laboratory tests using Turmco15 fluid & 25 micron filter. Field results may vary by application.



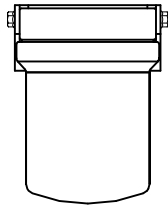
Flow Rate vs Restriction  
 \*PSI X 2.036 = inHg. / PSI X 6.895 = kPa

## Model Illustrations

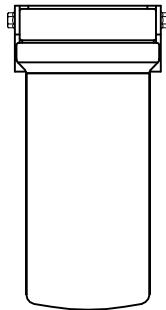
No Scale



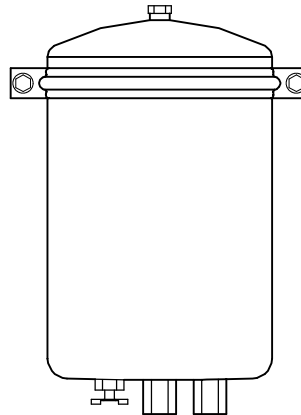
LFS 800



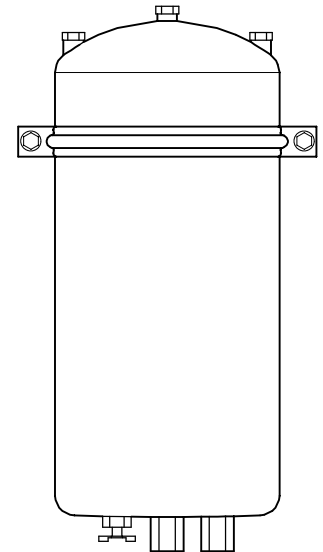
LFS 801



LFS 802



LFS 820



LFS 825

### LFS 800 SERIES BY-PASS OIL FILTRATION SYSTEMS

## Special Notes

1. Racor LFS 800 Series By-pass Oil Filtration Systems may be used with all LFS Oil Filtration Systems in this section.
2. For additional information and availability, contact customer service at: (800) 344-3286, 6 AM to 5 PM, Pacific Time.

## Specifications

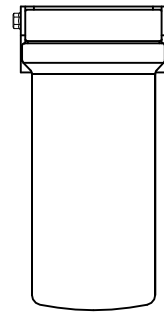
<b>BASIC MODELS</b>		<b>LFS 800</b>	<b>LFS 801</b>	<b>LFS 802</b>	<b>LFS 820</b>	<b>LFS 825</b>
Engine Horsepower (max.)/ Sump Cap.	Gal./LTR	150 2.5/9.5	250 5/18.9	400 15/57	500 30/114	800 45/170
Oil Flow Rate	GPM/LPM	.3/.9	.4/1.4	.5/1.9	1/3.8	1.5/5.7
Port Size	NPT	1/8"	1/4"	1/4"	1/2"	1/2"
Replacement Element		LFS 800BPE	LFS 801BPE	LFS 802BPE	LFS 820BPE	LFS 825BPE
Cannister Cap.	Gal./LTR	13/5	.3/.9	.5/1.9	2.5/9.5	3.5/13.3
Orifice Size	in/mm	.040/1	.040/1	.404/1	.093/2.4	.101/2.6
PSI, Maximum	PSI kPa	150 1034	150 1034	150 1034	150 1034	150 1034
Height	in mm	5.5 140	7.5 191	11 279	14.5 368	20 508
Width	in mm	4 102	5.25 133	5.25 133	9 229	9 229
Depth	in mm	4.5 114	5.7 145	5.7 145	9.15 233	9.15 233
Weight (dry)	Lbs kgs	3.2 1.45	5.3 2.40	8.0 3.63	13.7 6.21	18.9 8.57

Notes: 1. For accurate engine flow rates, consult your engine or equipment manual, manufacturer's agent or a Racor distributor.  
 2. Oil change frequencies are not affected and should be performed according to manufacturer's recommendations.  
 3. The only accredited way to extend your oil change interval is through a formal lube analysis program.

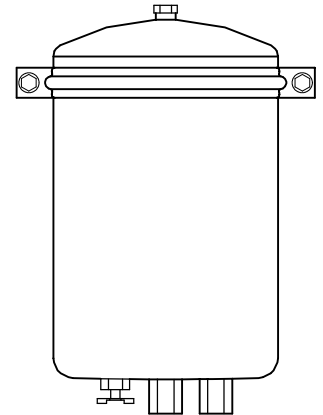
## SPECIFICATIONS - See introduction page.

**How to Order** - See example below.

<b>LFS</b>	<b>801</b>
<u>Lubrication Filtration Systems.</u> By-pass oil filters for gas and diesel engines.	<u>Specify one by engine horsepower.</u> <b>800:</b> 150 Horsepower <b>801:</b> 250 Horsepower <b>802:</b> 400 Horsepower <b>820:</b> 500+ Horsepower <b>825:</b> 800+ Horsepower



LFS 802



Outlet Inlet  
LFS 820/825

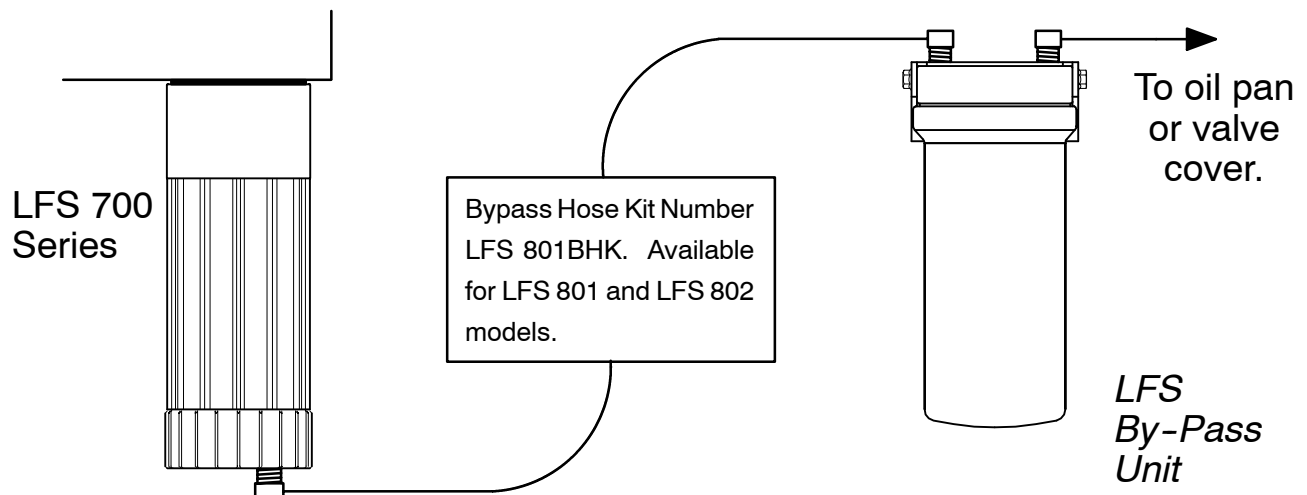
## Replacement Filter Elements / Seals

Model	Part Number	Qty./case	Seal Kit No.
LFS 800	<b>LFS 800BPE</b>	1	LFS RK46581
LFS 801	<b>LFS 801BPE</b>	1	LFS RK46582
LFS 802	<b>LFS 802BPE</b>	1	LFS RK46582
LFS 820	<b>LFS 820BPE</b>	1	LFS RK46583
LFS 825	<b>LFS 825BPE</b>	1	LFS RK46583

## General Information

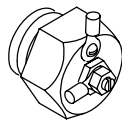
Racor By-pass Oil Filtration Systems are unique in their configuration. They feature a spin-on steel canister mounted to an aluminum head. The cartridge spin-on element is made of a computer wound, cotton woven media. The engineered design of the filter element provides more efficient filtration for a significantly longer period of time than pleated cellulose, stacked discs, and other cartridge filters

When a Racor By-pass Oil Filter is installed with a Racor Full Flow Lubrication Filtration System (LFS), the cost of lube oil, replacement filter, related disposal and maintenance are drastically reduced.

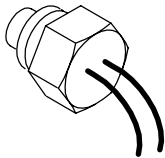


## Fluid By-pass Sensor Switch Kits

Kit Part No.	Description / Notes	Use with:	Qty.
LFS RK356LS	Standard By-pass Sensor Switch <i>Do not use above kits when filtering gasoline or other volatile fluids.</i>	LFS35, 55 & 60	1
LFS RK46138	By-pass Sensor Switch <i>Do not use above kits when filtering gasoline or other volatile fluids.</i>	LFS92	1
LFS RK760	Oil Analysis Kit <i>Use this kit to determine extended oil change intervals while using our By-Pass filtration units.</i>	All Models	1



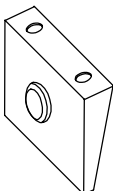
LFS RK356LS



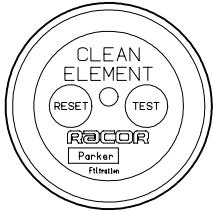
LFS RK46138

## Light Display Kits

Kit Part No.	Description / Notes	Use with:	Qty.
LFS RK356LSK	Complete By-pass Light Display Kit Includes By-pass Sensor also. 12 vdc.	LFS35, 55, 62 & 64	1
46032	By-pass Light Display only. 12 vdc.	LFS 92, 700 Series	1
46536	Connector Assembly with Relay (not shown)	LFS 700 Series	1
LFS RK46134	In-dash Light Display, 12 / 24 vdc. Informs the operator when filter servicing is required. Features a 10 min. timed delay to eliminate false readings. Light stays on until filter is serviced. Panel press-to-test buttons. Fits 2" diameter openings. Includes bracket for underdash mounting also. Order By-pass Sensor Switch separately (see above).  <i>Do not use above kits when filtering gasoline or other volatile fluids.</i>	LFS35, 62, 64, & 92	1



LFS RK356LSK  
46032

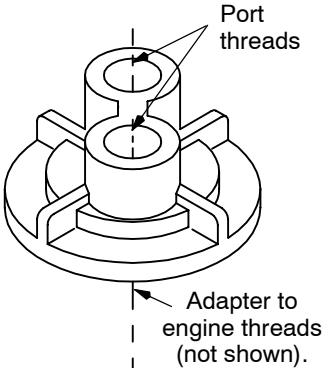


LFS RK46134

## Spin-on Oil Filter Adapter & Replacement O-ring Kits

Complete Kit Part No.	*Replacement Seal kit Part No.	Adapter to engine threads	Adapter in/out port threads	(O'berg No.)
LFS CHV-A	N/A	1/4"-20 (2)5/16"-18(2)	1/2"-14 NPTF	233
LFS 112-36A	RK 46169	1"-12	1/2"-14 NPTF	214
LFS 11212-48A	RK 46045	1 1/2"-12	1 5/16"-12 SAE	212
LFS 11216-41A	RK 46170	1 1/2"-16	1/2"-14 NPTF	269
LFS 11216-48A	RK 46045	1 1/2"-16	1 5/16"-12 SAE	219
LFS 11216-50A	N/A	1 1/2"-16	1 5/16"-12 SAE	247
LFS 116-36A	RK 46169	1"-16	1/2"-14 NPTF	252
LFS 11816-36A	RK 46169	1 1/8"-16	1/2"-14 NPTF	225
LFS 11816-48A	RK 46045	1 1/8"-16	1 5/16"-12 SAE	218
LFS 1316-36A	RK 46169	13/16"-16	1/2"-14 NPTF	222
LFS 13816-48A	RK 46045	1 3/8"-16	1 5/16"-12 SAE	210
LFS 15812-48A	RK 46045	1 5/8"-12	1 5/16"-12 SAE	N/A
LFS 1815-31A	RK 46169	18 mm X 1.5	1/2"-14 NPTF	250
LFS 2015-31A**	RK 46169	20 mm X 1.5	1/2"-14 NPTF	232
LFS 2015-36A	RK 46169	20 mm X 1.5	1/2"-14 NPTF	231
LFS 2215-31A	RK 46169	22 mm X 1.5	1/2"-14 NPTF	223
LFS 3416-31A	RK 46169	3/4"-16	1/2"-14 NPTF	213
LFS 5818-31A	RK 46169	5/8"-18	1/2"-14 NPTF	251

**TYPICAL ADAPTER**  
Kits include seal.



Port threads

Adapter to engine threads (not shown).

\*O-ring or gasket also available as a replacement.

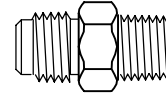
\*O-ring or gasket should be replaced if adapter is removed from engine, after being in service.  
 RK 46169: Gasket, 2.48"i.D.    RK 46045: O-ring, 3.73"i.D.    RK 46170: Gasket, 3.10"i.D.  
 \*\*Includes a spacer plate.

## Heavy Duty Hose and Fittings Kits

### LFS 35 AND 55: KIT No. LFS 35HK

**Includes**

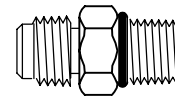
Medium pressure hose, SAE100R5 (Parker #201-6) (May be cut to desired length)	Qty. 8 feet
Straight fitting adapter, 3/8"NPT to #6 JIC (Parker #6-6FTX)	2
Straight fitting adapter, 1/2"NPT to #6 JIC (Parker #6-8FTX)	2
Swivel fitting, Hose to #6 JIC (Parker #20620-6-6)	4



Straight Fitting Adapter  
NPT x JIC

### LFS 62 / 64: KIT No. LFS 60HK

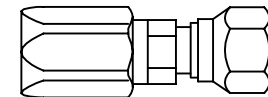
Medium pressure hose, SAE100R5 (Parker #201-12) (May be cut to desired length)	8 feet
Straight fitting adapter, 1 1/16"SAE to #12 JIC (Parker #12F50X)	2
Straight fitting adapter, 1/2"NPT to #12 JIC (Parker #12-8FTX)	2
Swivel fitting, Hose to #12 JIC (Parker #20620-12-12)	4



Straight Fitting Adapter  
SAE x JIC

### LFS 92: KIT No. LFS 90HK

Medium pressure hose, SAE100R5 (Parker #201-16) (May be cut to desired length)	8 feet
Straight fitting adapter, 1 5/16"SAE to #16 JIC (Parker #16F50X)	4
Swivel fitting, Hose to #16 JIC (Parker #20620-16-16)	4



Swivel Hose Fitting  
Hose to JIC

### ACCESSORIES FOR LFS 62 & 92 BY-PASS UNITS:

#### LFS RK46153-01

Tee fitting for LFS 92BP.	1
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#### LFS RK46153-02

Tee fitting for LFS 62BP	1
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#### LFS RK46159

Hose kit for LFS 62BP and LFS 92BP	1
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#### 46117

Fitting for LFS 62/64BP models. Reduces port to 3/8" NPT.	1
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### ACCESSORIES FOR LFS 700 SERIES:

LFS RK46588, Quick Fill Coupling, male 9/16-18 SAE thread	1
LFS RK46589, Adapter Coupling, female 1/4-18 NPT thread	1
LFS RK46590, Test Port Coupling, male 1/8-27 NPT thread	1

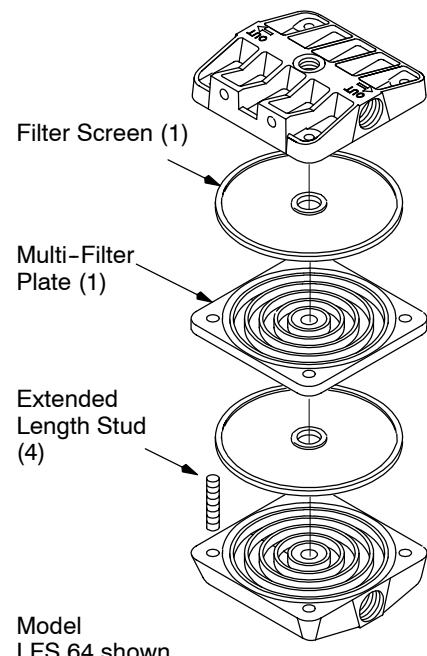
## Multi-Filter Kits

### LFS 62 / 64: KIT No. LFS RK60MFK

<b>Includes:</b>	<b>Qty.</b>
Multi-filter adapter plate	1
Extended Length Studs	4
LFS 6060WCF Filter Screen	1

### LFS 92: KIT No. LFS RK90MFK

<b>Includes:</b>	<b>Qty.</b>
Multi-filter adapter plate	1
Extended Length Studs	4
LFS 9060WCF Filter Screen	1



## **Quick Help Guide: All Models**

*ALL RACOR LFS MODELS ARE 100% TESTED TO ENSURE A LEAK-PROOF, QUALITY PRODUCT.*

In the event difficulties are experienced with your unit review the following most common questions asked about the LFS units:

### **WARNING LAMP REMAINS ILLUMINATED:**

**Q.** What causes the warning lamp on the LFS 35, 55, 62, 64, 92, 94, and 700LS Series to stay on and not go off?

**A.** This lamp indicates that the filter screen is dirty. On initial installations, the screen may appear to clog in a rather short time. This is normal for the first few 'clean-up' cycles. Thereafter, the frequency should stabilize and occur less often. If the lamp stays on after a cleaning, investigate the following:

*LFS 35, 55, 62, 64, 92, and 94:* With the filter halves separated and power supplied to the light switch, depress and release the by-pass mechanism. The light should be on when the by-pass is pushed down and go out when released. If the light switch does not function as indicated above, it will have to be replaced.

Note: It is important that the clear plastic insulator gasket between the switch and filter body be used and not distorted due to over tightening of the switch. If this gasket is missing, the warning lamp will stay on.

*LFS 700LS Series:* The LFS 700 Series light switch is normally closed when the light is off. If the lamp is illuminated, there are several possible reasons: the filter is dirty, there is an open circuit in the endcap, there is an open circuit in the connector plug, the connector plug is disconnected, there is an open circuit between the endcap and the relay, or there is a bad relay.

### **WARNING LAMP FLICKERS ON/OFF WHEN ENGINE IS FIRST STARTED:**

**Q.** What causes the lamp to flicker on and off when I first start the engine?

**A.** This will sometimes happen on a cold morning due to the thicker viscosity of the oil. Pushing cold oil through the element can build up enough pressure against the by-pass to cause the light to try to come on. The original equipment oil filter that you replaced when installing the LFS creates nearly twice the back pressure and generally goes into complete by-pass under these conditions. Only Racor's LFS is sensitive enough to indicate this insignificant amount of by-pass. The lamp must remain fully illuminated before a serious by-pass occurs.

### **FILTER CONTAMINATION:**

**Q.** When I open the filter it appears clean but the bottom side of it is full of particulates and debris.

**A.** This filter is plumbed backwards so the contaminants are on the 'wrong' side. If this happens, the unit will continue to filter until plugged and then it will hold the by-pass valve closed, and will not allow the light to come on. This will stop oil flow to the engine unless there is a built-in, by-pass relief valve in the engine.

The Racor engine spin-on filter adapter replacements are marked IN and OUT or have arrows indicating flow direction. The LFS oil filter housings are also clearly marked IN and OUT or have arrows indicating flow direction.

*NOTE: Do not match IN to IN or OUT to OUT! Remember the oil flows **out** from the engine and **in** to the filter. Then, it flows **out** of the filter and back **into** the engine.*

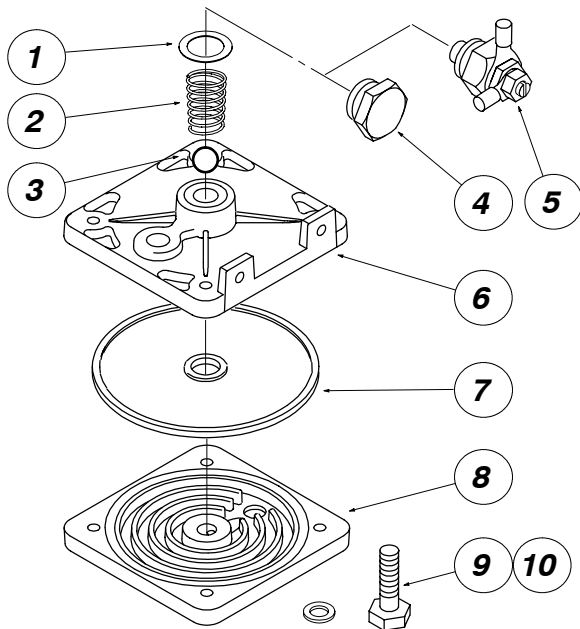
**Q.** How do I determine which filter to use for a given application?

**A.** Refer to the LFS application guide for remote mount units, the adapter part number and recommended filter size will be listed. If you have a non listed or specialized application, size the filter by flow rate capacity and the adapter by comparing the OEM specification for thread and gasket dimensions. The flow rate specs for each filter are listed the the 7460 brochure and in this parts book.

The application guide for the cleanable Spin-on 700LS Series is on page 221.

For additional assistance, call your Racor Dealer or Racor Customer Service at (209) 521-7860 or (800) 344-3286, 6 AM to 5 PM, Pacific Time, or e-mail us from our website, [www.parker.com/racor](http://www.parker.com/racor).

The LFS 55 has been replaced by the LFS 62.



Item	Part No.	Description	Qty.
1	46003	Gasket, Plug/Switch	1
2	46005	Spring, 6" series	1
3	LFS RK35BB	Check Ball, 1/2" diameter	1
4	46004	Plug, 6" series	1
5	LFS RK356LS <sup>1</sup>	By-pass Sensor	1
6	46042	Housing, Outlet	1
7	LFS5528WCF	28 Micron Stainless Steel Filter	1
	LFS5540WCF	40 Micron Stainless Steel Filter	1
	LFS5560WCF	60 Micron Stainless Steel Filter	1
8	46041	Housing, Inlet	1
9	46039	Washer	4
10	46038	Capscrew, 5/16" - 18 X 1"	4
	46078	Installation Instructions	

<sup>1</sup> Do not use sensor when filtering gasoline or volatile fluids.  
For visual indicator kits, fittings, hose information and adapters, see the Accessories Section